

DWPI

DERWENT-ACC-NO: 1980-85642C

DERWENT-WEEK: 198048

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TITLE: White gold alloy for jewellery applications - contains  
palladium, iron,

copper, silver, zinc, nickel, cobalt, tin and indium

PATENT-ASSIGNEE: INT GOLD CORP[ITGON]

PRIORITY-DATA: 1980RD-0199034 (October 20, 1980)

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES MAIN-IPC

RD 199034 A November 10, 1980

N/A

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N/A

INT-CL (IPC): C22C000/01

ABSTRACTED-PUB-NO: RD 199034A

BASIC-ABSTRACT: A new white gold alloy has the compsn. (by wt.)  
70-80 (pref.

75)% Au, 3-20 (pref. 4-16)% Pd, 1-20 (pref. 5-15)% Fe, 0-10% Cu,  
0-10% Ag, 0-5%

Zn and 10% total of 0-5% Ni, 0-10% Co, 0-10% Sn and 0-10% In.

The Vickers hardness of the alloy can be predicted from  $HV = 21 + 3.2(Pd\%) +$

$14.3 (Ni\%) + 8.6 (Fe\%) + 9.6 (Co\%) + 9.1 (In\%) + 10.2 (Sn\%) + 5.9$   
 $(Cu\%) + 0.4$

$(Ag\%) + 2.6 (Zn\%)$ .

The colour (metric chroma value) of the alloy can be predicted  
from  $C = 37.90 =$

$1.32 (Pd\%) - 1.26 (Ni\%) - 1.32 (Fe\%) - 1.20 (Co\%) - 0.92 (In\%) -$   
 $0.83 (Sn\%) -$

$1.01 (Co\%) - 0.89 (Ag\%) - 0.84 (Zn\%)$ .

DERWENT-CLASS: M26

CPI-CODES: M26-B01; M26-B01C; M26-B01J; M26-B01N; M26-B01T;